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Tadashi Yano

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EXAMINER

SPINELLA, KEVIN

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/590,196	Applicant(s) YANO ET AL.	
	Examiner KEVIN SPINELLA	Art Unit 2885	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-27 and 29-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-27 and 29-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment filed 12/8/2008 has been entered. Currently, Claims 16-27 and 29-35 are pending in the application. The marked up and substitute specifications filed 12/8/2008 have also been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 16-22, 24-27, and 29-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Oki et al. (European Publication No.: EP 1245898 A1).

In regard to Claims 16 and 27, Oki discloses a backlight (Col. 1, line 8: “backlight”) for a liquid crystal display (Col. 1, lines 8-9: “liquid crystal display devices”), comprising: a plurality (Figure 2) of fluorescent lamps 1 (Col. 5, line 52), each fluorescent lamp having an outer periphery (Figure 3, i.e. circumference of lamps 1 constitutes its outer periphery); a plurality (Figure 2) of cover layers 3 (Col. 7, line 3) including a first resin (Col. 7, line 3) and respectively covering (Figure 2, i.e. along a bottom circumferential portion thereof) the outer periphery (Figure 3, i.e. circumference of lamps 1 constitutes its outer periphery) of each fluorescent lamp 1 (Col. 5, line 52);

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and a holder member 2 (Col. 6, lines 54-55) including a second resin (Col. 6, lines 54-55) in which the plurality (Figure 2) of fluorescent lamps 1 (Col. 5, line 52) are enclosed (Figure 2, i.e. protruding holder members 2 enclose a single fluorescent lamp 1 and cover layer 3 within) so as to be juxtaposed with each other (Figure 2), the holder member 2 (Col. 6, lines 54-55) having a first side (Figure 2, i.e. first longitudinal end) and a second side (Figure 2, i.e. second longitudinal end) opposed to the first side (Figure 2), wherein the holder member 2 (Col. 6, lines 54-55) comprises a plurality of accommodation holes 2a (Figure 2, Col. 6, lines 55-56: "concave grooves" constitute through-holes) penetrating (Figure 2, i.e. in the groove direction) from the first side to the second side (Figure 2), and wherein the plurality of fluorescent lamps 1 (Col. 5, line 52) are respectively disposed (Figure 2) in the plurality of accommodation holes 2a (Figure 2, Col. 6, lines 55-56: "concave grooves" constitute through-holes).

In regard to Claims 17, 19, and 35, Oki discloses a hardness of the first resin (Col. 7, line 3) is lower (i.e. silicon resin operationally required to be less hard than polycarbonate resin) than a hardness of the second resin (Col. 6, lines 54-55), and a heat resistance of the first resin (Col. 7, line 3) is greater (i.e. silicon resin operationally required to have greater heat resistance than polycarbonate resin) than a heat resistance of the second resin (Col. 6, lines 54-55).

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In regard to Claim 18, Oki discloses the first resin is a gel-form resin (Col. 4, lines 18-20, i.e. hardening liquid state) and the second resin is a rigid resin (Col. 6, lines 54-55, i.e. rigid polycarbonate).

In regard to Claim 20, Oki discloses the first resin (Col. 7, line 3) is a silicone resin (Col. 7, lines 3-4) or a fluoride resin (Col. 6, lines 49-51), and wherein the second resin (Col. 6, lines 54-55) is a polycarbonate resin (Col. 6, lines 54-55).

In regard to Claim 21, Oki discloses each fluorescent lamp 1 (Col. 5, line 52) of the plurality (Figure 2) of fluorescent lamps 1 (Col. 5, line 52) has a first end and a second end (Figure 2), and wherein at least one of the first end and the second end (Figure 2) of each of the fluorescent lamps 1 (Col. 5, line 52) is projected out (Figure 2, i.e. lengthwise) of the holder member 2 (Col. 6, lines 54-55).

In regard to Claim 22, Oki discloses a thickness (Figure 2) of each cover layer 3 (Col. 7, line 3) is uniform in a longitudinal direction (Figure 2) of each fluorescent lamp 1 (Col. 5, line 52).

In regard to Claim 24, Oki discloses each accommodation hole 2a (Col. 6, lines 55-56) has a circumscribing (i.e. enclosing within lateral bounds) wall 2 (Figure 2, Col. 6, lines 54-55), wherein the plurality (Figure 2) of fluorescent lamps 1 (Col. 5, line 52) are enclosed (Figure 2, i.e. protruding holder members 2 enclose a single fluorescent

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lamp 1 and cover layer 3 laterally within) in the holder member 2 (Col. 6, lines 54-55) by respectively being inserted (i.e. fluorescent lamp operationally required to be inserted, Col. 4, lines 18-20) into the plurality (Figure 2) of accommodation holes 2a (Col. 6, lines 55-56) such that the plurality (Figure 2) of cover layers 3 (Col. 7, line 3) are in close contact (Figure 2) with the plurality of circumscribing (i.e. enclosing within lateral bounds) walls 2 (Figure 2, Col. 6, lines 54-55).

In regard to Claims 25 and 31, Oki discloses wherein the plurality (Figure 2) of fluorescent lamps 1 (Col. 5, line 52) are respectively disposed in (Figure 2) the plurality of accommodation holes 2a (Col. 6, lines 55-56), and wherein the plurality (Figure 2) of fluorescent lamps 1 (Col. 5, line 52) and cover layers 3 are detachable (i.e. upon application of sufficient heat to liquefy silicone resin cover layer 3, fluorescent lamps are in fact detachable) from the plurality of accommodation holes 2a (Col. 6, lines 55-56).

In regard to Claim 26, Oki discloses the plurality (Figure 2) of fluorescent lamps 1 (Col. 5, line 52) each have a first end and a second end (Figure 2), and the plurality (Figure 2) of fluorescent lamps 1 (Col. 5, line 52) are inserted in (Figure 2, i.e. operationally required) the plurality of accommodation holes 2a (Col. 6, lines 55-56) such that each first end extends from the first side (Figure 2) of the holder member 2 (Col. 6, lines 54-55) beyond the holder member 2 (Col. 6, lines 54-55) in a longitudinal direction (Figure 2) and each second end extends from the second side (Figure 2) of the holder member 2 (Col. 6, lines 54-55) beyond the holder member 2 (Col. 6, lines 54-55)

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in the longitudinal direction (Figure 2).

In regard to Claim 29, Oki discloses each fluorescent lamp 1 (Col. 5, line 52) has a cross-section (Figure 2) orthogonal to a longitudinal direction (Figure 2) of the fluorescent lamp 1 (Col. 5, line 52), the cross-section (Figure 2) being completely circumscribed (Figure 2, i.e. completely enclosed within lateral bounds) by a respective cover layer 3 (Col. 7, line 3) of the plurality (Figure 2) of cover layers 3 (Col. 7, line 3).

In regard to Claim 30, Oki teaches each of the cover layers 3 (Col. 7, line 3) is circumscribed (Figure 2, i.e. enclosed within lateral bounds) by the holder member 2 (Col. 6, lines 54-55).

In regard to Claim 32, Oki teaches the plurality (Figure 2) of accommodation holes 2a (Col. 6, lines 55-56) is discrete (paragraph 48, line 2) such that the plurality of fluorescent lamps 1 (Col. 5, line 52) is isolated (Figure 2).

In regard to Claims 33, Oki teaches each cover layer 3 (Col. 7, line 3) has an outer circumference (Figure 2, i.e. outer boundary, perimeter) wherein the distance (Figure 2, i.e. lateral/width distance) between the outer periphery (Figure 3, i.e. circumference of lamps 1 constitutes its outer periphery) and the outer circumference (Figure 2, i.e. outer boundary, perimeter) constitutes a thickness (Figure 2) of the cover

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layer 3 (Col. 7, line 3), and wherein the thickness is uniform (Figure 2, i.e. identical cover layer 3 thickness to right and left of lamp 1).

In regard to Claim 34, Oki teaches each accommodation hole 2a (Col. 6, lines 55-56) is a thru-hole (Figure 2).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oki.

Although Oki lacks each of the fluorescent lamps comprises a bulb with a diameter 4 mm or greater, and each of the fluorescent lamps is 300 mm or greater in length, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate fluorescent lamps having a bulb diameter of 4 mm or greater and a length of 300 mm or greater in order to allow for large enough fluorescent lamps compatible with the dimensions of a typical LCD backlight display for emitting substantial light, and since it has been held by the courts that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device, and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably

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distinct from the prior art device. *In Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984).

Response to Arguments

6. Applicant's arguments filed 12/8/2008 in pages 8-10 of the Remarks section have been fully considered but they are not persuasive.

7. In response to applicant's argument that Oki does not disclose a "plurality of accommodation holes," but rather a single hole forming several concave grooves, the examiner disagrees as indicated in paragraph 5 above. Oki clearly teaches a plurality (Figure 2) of accommodation holes 2a (Figure 2, Col. 6, lines 55-56: "5 concave grooves" constitute 5 through-holes). It would be well understood by one of ordinary skill in the art that a groove as shown in Oki constitutes a hole, and accordingly, as there are 5 concave grooves, there are 5 or a plurality of holes. Thus, applicant's argument is in error.

8. In response to applicant's argument that the grooves of Oki do not penetrate the holder member, the examiner disagrees as indicated in paragraph 5 above. Oki clearly teaches a plurality of accommodation holes 2a (Figure 2, Col. 6, lines 55-56: "concave grooves" constitute through-holes) penetrating (Figure 2, i.e. penetrating vertically in the groove concave direction) the holder member 2 (Col. 6, lines 54-55). The examiner notes initially that the term "penetrate" is broad, and further that the applicant has not claimed the manner in which the accommodation holes penetrate the holder member, and thus the examiner's interpretation is a valid one. The examiner encourages

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applicant to amend the claims to distinguish the invention at hand over that of the Oki reference.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

10. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN SPINELLA whose telephone number is (571) 270-1284. The examiner can normally be reached on Monday - Friday, from 7:30 a.m. to 5:00 p.m. EST.

12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jong-Suk (James) Lee can be reached on (571) 272-7044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KJS

1/22/2009

/Anabel M Ton/

Examiner, Art Unit 2875